

# Review and Analysis of the Literature: The Business Benefits of Employee Development

MARCH 15, 2010

## About the Insight Center for Community Economic Development

We work in collaboration with foundations, nonprofits, educational institutions and businesses to develop, strengthen and promote programs and public policy that:

- Lead to good jobs—jobs that pay enough to support a family, offer benefits and the opportunity to advance
- Strengthen early care and education systems so that children can thrive and parents can work or go to school
- Enable people and communities to build financial and educational assets

The Insight Center was founded in 1969 as the National Economic Development and Law Center (NEDLC).

## About the National Network of Sector Partners (NNSP)

NNSP is an initiative of the Insight Center for Community Economic Development and is a nation-wide membership organization dedicated to promoting and increasing support for sector initiatives. NNSP promotes the use of sector initiatives and strategies that support them in order to improve employment and economic opportunities for low-income individuals, families, and communities, to strengthen industry sectors that are important to regional labor markets, and to increase regional economic vitality.

Sector initiatives are regional, industry-focused approaches to workforce and economic development that improve access to good jobs and/or increase job quality in ways that strengthen an industry's workforce. Our vision is that, as a result of investment in sector initiatives, regional economies will have good jobs and plentiful advancement opportunities, all people will have access to these jobs and opportunities, industry sectors important to those regions will provide them, and all communities will share in the resulting economic vitality.

NNSP's members include sector initiative leaders, policy makers, researchers, business, labor, funders, and supporters. We are guided by a national advisory committee composed of leaders and supporters of sector initiatives.

## Acknowledgments

The publication author is Tim Lohrentz, with direction from Jack Mills, Director of the National Network of Sector Partners. Funding for this report was generously provided by the Hitachi Foundation.

## Section 1: Introduction and Objective of the Research

This paper will explore the idea that businesses that have an employee development practice among entry-level workers will realize a business benefit. This business benefit may include increased employee retention rates, higher productivity, and increased customer satisfaction, among other things. For example, the higher retention rate may be due, in part, to better working conditions, job quality, pay, and potential advancement opportunities for employees. Employee development includes, but is not limited to, training of employees; an emphasis on the internal advancement of entry-level or low-skilled (and usually low-wage) workers; creation of job ladders for these workers when none or few have existed; and mentorship or other support of such workers.

Before discussing the literature on the practice and measurement of employee development, it would be helpful to place it in the context of the changing American workplace, since employee development may be only one component of workplace transformation.

Researcher Robert Glover and labor economist Christopher King note that employees can no longer count on mid- or long-term relationships with one employer, characterized by career advancement, training opportunities, and a retirement plan.<sup>1</sup> Many of the previous career ladders within a company or industry are no longer present.

At the same time that many companies have declining internal career ladders, the U.S. workplace is transforming toward a more flexible work organization, more authority and decision-making power delegated to lower level employees, and jobs that are broader and enriched (Rocio Bonet<sup>2</sup>, 2006). This leads to innovative work practices, including teamwork, problem-solving teams, information sharing, job rotation, and new types of training.

Some call this re-design of human resource and production practices “high-performance work practices” (James Combs, Yongmei Liu, Angela Hall, and David Ketchen, 2006<sup>3</sup>). These practices include: incentive compensation, training, employee participation, and flexible work arrangements.

It is important to place employee development within the context of business strategies. Some companies pursue a strategy of hiring lower skilled workers at a lower wage but then providing more remedial training. Other companies pursue a strategy of hiring more experienced workers at a higher wage level and providing a different set of employee development activities. It may be necessary to measure those activities and their impacts in relationship to the hiring strategy. For example, training costs and wage gains may be higher among companies that tend to hire lower skilled workers at lower starting wages.

This paper consists of a review and analysis of the literature. In many cases, the same literature discusses multiple topics. The paper will begin with a description of employee development practices, especially among entry-level workers. This description will include a summary of how to implement such practices, based on the literature review.

Next, the paper will discuss what the literature says regarding measures of the business benefits on employee development activities, including how to measure the benefit / cost ratio of the activities. This section will also review whether or not the literature suggests that there is a net business benefit to employee development practices.

The fourth section will look at the literature on the impact of employee development practices on workers, such as increased wages, and will discuss measures that are used to measure this impact.

The last section will identify the factors of success in developing an effective employment program, including possible policy or advocacy levers that would incentivize businesses to implement an employee development practice among entry-level workers.

## Section 2: Employee Development Practices among Entry-Level Workers

This section will describe employee development practices among entry-level workers, including summaries from the literature of how to implement such a practice. It will also discuss any research regarding the impact of various employee development practices both on firms and on employees.

Employee development includes training and skill development of employees, an emphasis on the internal advancement of entry-level or low-skilled workers, the creation of job ladders for these workers when none or few have existed; mentorship; and support services through referrals to service providers, especially among low-skilled workers. Susan Crandall<sup>4</sup> offers one of the broader definitions of employee development activities by stating that the best practices are: training, career ladder development, and mentoring.

Among the lowest skilled workers, the range of employee development practices may need to be greater and the cost for such practices may need to be shared by governmental or philanthropic sources. For example, various nonprofit-employer partnerships in the Jobs Initiative, funded by the Annie E. Casey Foundation, provided mentorship and support services to low-skilled workers, in addition to short- and long-term training.<sup>5</sup>

A career ladder or lattice approach is also emphasized by the SBCTC Career Pathways Institute<sup>6</sup>, which it defines in a minimal way as creating opportunities for wage and position advancement for entry-level workers. These opportunities are based on ladder 'rungs' each adding core skills sets and competencies to the previous level.

Jill Casner-Lotto, Elyse Rosenblum, and Mary Wright<sup>7</sup> focus on activities, such as workplace training, an employee apprenticeship school, and a mentorship program. They also discuss informal training, including use of an internal intranet, voluntary informal mentoring, informal lunch-and-learn sessions, peer-to-peer coaching, and open agenda time during regular meetings earmarked for sharing and learning.

Of these activities, the one that is most typical within firms and most discussed in the literature, is training. For example, the State of Corporate Citizenship 2009 Survey (SCC 2009)<sup>8</sup> includes training and skill development in its discussion of employee development.

Casner-Lotto, Rosenblum, and Wright state that the training provided by employers generally relates to three categories: workforce readiness training, job-specific training, and career development. Workforce readiness training refers to skills that any employee is expected to have when entering the workforce. Job-specific training refers to training which prepares employees to perform a specific function or job. Career development refers to training which primarily helps a worker to advance in their job or career. Of companies that provide workforce readiness training, 19 percent of their training budget goes to workforce readiness training, 20 percent to career development training, while the bulk, 61 percent, is spent on job-specific training.

Through an examination of case studies, Casner-Lotto, Rosenblum, and Wright point out the tension between hiring lower skilled workers at a lower cost and providing a larger amount of remedial training versus hiring higher skilled workers at a higher initial wage and focusing on higher-level employee development. This distinction is useful and helps point out that it may be necessary to separate the discussion on employee development, depending if the company tends to hire entry level workers with very low skill levels at low wages or workers with somewhat higher skill levels at higher wages.

Susan Imel divides workplace training into two categories – remedial or higher-level skills. Remedial training may include basic skills such as reading, writing, math, and communication. Higher-level skills include taking the initiative, identifying and solving problems, decision-making, and ability to engage in a wide range of tasks<sup>9</sup>.

Employee training and education is without a doubt more common at higher levels within the typical workplace. Amanda Ahlstrand, Laurie Bassi, and Daniel McMurrer<sup>10</sup> state that in 1995, 22 percent of workers in the bottom income quintile received employer-supported education in the prior year, compared to 40 percent of workers in the top income quintile.

Harley Frazis and Mark Loewenstein<sup>11</sup> report that the incidence of formal training on-the-job may be increasing, with one early 1990s study stating that 17 percent of workers had received in the previous year, while two studies from later in the 1990s reported 27 percent and 32 percent of workers received formal employer-supported training, respectively. However, when looking at a 1982 data source that included only low-wage workers, they report that 14 percent had received formal employer-supported training.

Maureen Conway, Amy Kays Blair, and Catherine Gibbons<sup>12</sup> reviewed various studies and found mixed evidence for employee training by industry sector, with more training tending to be provided by nondurable goods manufacturing and finance and insurance firms. On the other hand, less training was provided by retail trade firms. Industries that had contradictory reports of employee training frequency were wholesale trade and health care. They also found that larger employers – those with at least 50 employees – were more likely to provide employee training.

Aside from training, another employee development practice that may be critical for a firm's low-skilled workforce may be a referral system for needed social services (Jennifer Freeman and Judith Combes Taylor<sup>13</sup> and Tony Proscio and Mark Elliott<sup>14</sup>). Freeman and Combes Taylor discuss in detail employee development practices that are specifically focused on increasing job retention among low-skilled workers. They emphasize that businesses should partner with community-based providers (or vice versa) to provide referrals to a wide range of social service programs, including transportation. In addition, they state that community partners could help businesses to develop flex-time policies that might help low-skilled workers to address personal and family obligations while meeting work responsibilities. They state that it is important for supervisors in particular to develop relationships with community-based providers in order to better manage problems that may come up with low-skilled workers.

Casner-Lotto, Rosenblum, and Wright offer examples of how various companies have implemented employee development programs. For example, one company identifies workforce readiness training deficits in the first 90 days of employment and offers web-based readiness training modules built into the system, including communications, teamwork, interpersonal skills, and goal setting. The system tracks employees' training and development goals and strategies for each employee. At the 90 day performance review, as well as subsequent annual reviews, supervisors spot any skills gaps and recommend needed remedial training as well as career development training to help employees advance in their current job and grow throughout their tenure with the company.

In many cases, employee development programs are aided by partnerships between businesses and workforce development organizations that assist the business in its training or other advancement activities. This may help the business to reduce its training costs for incumbent workers or improve the quality of such training.

## Section 3: How Firms Measure Employee Development Practices and their Business Benefits

This section provides a description of how firms measure employee development practices, as well as a summary of the benefits to businesses that place an emphasis on entry-level employee development.

Perhaps it is necessary to start with the question of why firms conduct employee development practices. A survey of hundreds of firms found that firms say that they carry out employee development in order to improve productivity, reduce turnover, and, to a lesser extent, fill skill gaps (SCC, 2009).

### A. Measures of the Business Benefits of Employee Development Programs

Jack J. Phillips<sup>15</sup> suggests that businesses have four types of measures that they use to evaluate the impact of employee development activities:

1. Measurements of reaction to the activity – for example if the participants in training had a positive reaction and had identified action items for themselves as a result of the training.
2. Measurements of learning – for example, measuring if participants acquired a certain skill or set of knowledge as a result of the activity.
3. Measurements of application of the activity on the job, including the frequency of use of the skills learned as well as barriers to being used.
4. Identification and measurements of business results from the activities.

The measures themselves can be taken from seven types of information: surveys, questionnaires, interviews, focus groups, tests, observation, and performance records. For all of the measures it is important to isolate the results caused by the activity.

Generally, only the measures within the fourth of the categories mentioned by Phillips would be used to calculate the impact of employee development. However, it is necessary to track and analyze data for the first three types of measures in order to ensure that there is a link between the employee development activity (ies) and the measured business result.

The measures for the employee development programs will depend in part on the actual activities that are part of the employee development program and what those activities were intending to impact, but based on Phillips; the SBCTC Career Pathways Institute; and Conway, Kays Blair, and Gibbons they could include:

- Increased rate of employee retention
- Lower rate of employee absenteeism
- Increased quality of work or service, which could be measured by:
  - decline in waste
  - decline in product rejection or error rate
  - increase in customer satisfaction or retention
  - better health and safety record
- Increased productivity, which could be measured by:
  - less time spent per task or per unit
  - increased output of products or services
  - time savings for supervisors
  - improved capacity to use new technology
- Increased sales
- Increased cooperation and ability to adjust to the future, which could be measured by:
  - better team performance
  - improved capacity to cope with change in the workplace

Phillips also stresses the need to monetize the value of the results of the activities to the extent possible. Even so, there may be some benefits that remain intangible, including increased job satisfaction, organizational commitment, teamwork, customer service, reduced complaints and conflicts.

The Aspen Institute's Workforce Strategies Initiative<sup>16</sup> (WSI) defines the measures of the business benefits slightly differently than Phillips, stating that there are at least six indicators of business benefits:

- Attrition Rates
- Savings in Recruitment and Hiring
- Job Satisfaction Rates
- Client Satisfaction, at least for direct service industries
- Time savings for supervisors
- Increased and Higher Quality Communication

On inspection, we see that the first two of WSI's measures are both related to the increased rate of employee retention. Other WSI measures may be best seen as proxies for more direct business benefits, such as time savings for supervisors, which is a measure of increased productivity and increased client satisfaction, which is a measure of increased quality of work. Likewise, higher quality communication is perhaps best seen as a proxy for increased productivity or an intangible benefit.

The Massachusetts Workforce Training Fund, which provides funds to firms for incumbent worker training, asked firms to self-evaluate the impact of that training on the firms with over 40 indicators, categorizing them into productivity improvement, competitiveness improvement, or other benefits.<sup>17</sup> Competitiveness improvement is essentially analogous to the 'increased quality' mentioned by Phillips.

Ahlstrand, Bassi, and McMurrer (2003) state that the benefits to companies are increased productivity, employee retention and customer satisfaction. In a separate study, Bassi and McMurrer<sup>18</sup> state that an additional measure is performance in the stock market. Their findings showed that firms that made large investments in employee development outperformed the control group in the stock market.

Michael Bloom and Brenda Lafleur suggest similar business benefit measures as those already mentioned.<sup>19</sup> They mention three specific productivity measures – increased output of products and services, reduced time per task, reduced waste. They also mention three quality measures – reduced error rate, better health and safety record, and increased customer retention. Finally, they also concur with the increased employee retention benefit.

Casner-Lotto, Rosenblum, and Wright provide several case studies which demonstrate that each company has unique measures for employee development outcomes. In terms of outcomes, one company used measures such as attrition rate five years after completing an intensive program, range of positions by formerly entry-level workers five years after completing an intensive program, and percent of line management that started as entry-level workers. Another company measures increases in productivity, which they measure by looking at efficiency, consistency, and speed.

Scott Brum<sup>20</sup> discusses that it is worthwhile for companies to measure why training may lead to reduced turnover rates, such as increasing employee commitment, increasing loyalty by providing a 'gift', increasing identification with the organization, and providing that primarily permits them to improve performance with the company but not necessarily outside the organization.

Casner-Lotto, Rosenblum, and Wright state that it is difficult for companies to measure the costs of employee development programs because most companies do not disaggregate their training budgets, such as career development training.

The measures of business benefit listed above should be the basis for the development of benchmarks, based on this review of the literature. The literature suggests that each company, its past practices, and its need for specific skills, is unique, so that while it may use similar measures as others, it should initially set its own level or goal. The key is that companies attempt to measure the impact of employee development and that the results of employee development should have a positive net impact, that is, the direct monetized benefits of the program should be greater than the direct costs of the program.

## **B. Measures for Benefit / Cost Analysis of Employee Development: An Approach to Benchmarking?**

This review is not meant to be a comprehensive guide on how to create organizational metrics that will allow for a benefit / cost analysis of employee development activities. One can look toward the works of Jack J. Phillips for that detailed information.<sup>21</sup> For example, Phillips describes how the benefits of the program can be derived from a process of measuring the monetary value of the impacts of the program (those already described above).

In order to compare benefits to costs and to calculate return on investment, it is necessary to determine the costs of the employee development activities. Phillips<sup>22</sup> suggests seven types of costs to employee development programs:

- cost to design and develop the program
- cost of all program materials
- cost for instructor or facilitator, including prep
- cost of facilities
- travel, lodging, and meals, if applicable
- salaries and benefits for time away from work by participants while in the program
- administrative and overhead costs of the program

Brum concurs with the time away from work measure that is sometimes ignored by companies.

Amy Blair<sup>23</sup> suggests that companies should measure not only the total cost of the employee development activities, but also calculate the per participant cost. This is especially important when measuring the impact of reduced turnover based on a comparison of the cost per employee of recruitment, hiring, and initial training.

Hollenbeck (2008) estimates the return on investment by extrapolating the value added from the self-reported wage increases that result from incumbent worker training. While this may help demonstrate the worth of public investment in incumbent worker training, the value added estimate has too many assumptions to be useful for an individual firm that may be deciding whether to invest in employee development.

Generally a benefit / cost comparison is expressed as a ratio. A ratio of 2:1 would mean that the total monetized benefits of the activity are twice that of the total costs of the activity. It is not possible nor recommended that benchmarks be developed in terms of the benefit / cost ratio given the unique character of each company and each employee development activity. Generally employee development activities should result in a benefit / cost ratio of greater than 1:1. However, when evaluating employee development activities among very low skilled workers, the benefit to cost ratio (including both the cost to the employer as well as any public subsidy) may be less than 1:1 (Hollenbeck, 2008), thus the need for the public subsidy which is providing a public good.

## **C. Do Employee Development Programs Result in a Business Benefit?**

Bloom and Lafleur (1999) report from a survey of 500 CEOs, that 98 percent reported at least one business benefit from workplace training, the main component of most employee development programs. The most

common business benefits mentioned by survey respondents related to higher productivity and higher quality of work. Forty percent of survey respondents said that workplace training led to increased employee retention and 33 percent said that it reduced absenteeism.

Frazis and Spletzer (2005) found that when examining a large longitudinal worker survey, that individuals who received company training had a job separation rate that is 8 percent lower than individuals with no such training. School training, on the other hand, had no impact on increased job retention rates.<sup>24</sup>

Hollenbeck (2008) found that 92 percent of firms participating in the Massachusetts incumbent worker training program reported increases in quality (competitiveness) and 91 percent reported increased productivity. For example, 50 percent of firms said that the training led to improved efficiency, one of the productivity measures.

Conway, Kays, Blair, and Gibbons (2003) found studies in their literature review that correlated employee training with reduced production error rates.

In relation to increased quality, a Commonwealth Corporation study found that the creation of career ladders within the nursing home industry was found to have a significant impact on the behavior of residents of the nursing homes, compared to non-participating nursing homes<sup>25</sup>. Specifically, the rate of “worsening behavior problems” was significantly reduced.

## Section 4: The Impact of Employee Development Practices on Workers

There is much less research and literature on the impact of employee development practices on workers. The best studies utilize worker surveys and are not firm specific, that is, the training received by workers in the workplace may or may not be part of a formal employee development program of an employer.

In analyzing these worker surveys, Paul Lengermann found that young workers reporting to have received company-facilitated training, averaging 165 total hours per year, had a total wage gain of 6 percent.<sup>26</sup> Using the same data source as Lengermann, Frazis and Loewenstein (2005) found that 60 hours of training produced a median wage gain of 5 percent, although the wage gain was higher with higher skilled, higher wage workers.<sup>27</sup>

Lengermann further found that the wage gains are generally immediate and shorter term. On the other hand, young workers who received school based training or apprenticeships, whether or not paid for by employers, tended to have a lag in wage gains although the wage gains appeared to be longer lasting.

Like Lengermann, Anne Gielen<sup>28</sup> and Ahlstrand, Bassi, and McMurrer (2003) also found that employee training positively impacted wages. Ahlstrand, et al, reviewed literature that stated a much higher wage gain from training than Lengermann: when looking at all workers, one study showed an 8 percent wage gain for every 40 additional hours of workplace training.

Another body of the literature addresses the subject in relation to employers who are part of a larger partnership involving a publicly subsidized training program where the employers may not be the lead organization. As such, it is best to interpret the impact on workers as most applicable to workers in those companies receiving some type of public subsidy for employee training. For example, Hollenbeck (2008) found that nearly half of firms (48 percent) participating in the Massachusetts incumbent worker training program reported increases in wages of workers participating in that training, while 41 percent of firms reported that workers were promoted as a result of the training. As one would expect, many of the firms that were engaged in employee training increased wages due to increased skill level resulting from the training.

We consider the measurable benefits to the employee of employee development practices to also be a social responsibility measure for businesses. And in the case of companies receiving some type of public subsidy for providing employee development, some set of employee benefit measures should be employed, in order to demonstrate a public good. Based on the set of literature reviewed for this study, the employee benefit measures should include:

- Percent of entry-level workers offered training or mentoring
- Number of hours of training per year per employee (Casner-Lotto, Rosenblum, and Wright)
- Amount invested in training per entry-level worker
- Better working conditions
- Increase in pay or benefits
- Number of promotions and pay level after promotion
- Potential advancement opportunities for entry-level workers, such as creation of a career ladder where none previously existed
- Percent of internal hirings for low-mid or mid-level positions
- Percent of line management that started as entry-level workers
- Level within organization several (i.e. five) years after training or other significant employee development (such as number of employees at high, mid, or lower management positions)
- Job satisfaction of employees

It is critical that any measures take into account the skill and wage level of entry level workers within a company. Companies that hire lower skilled workers at a lower wage may need to provide a different set of employee development activities. In addition, how those activities and their impact are measured varies depending on the hiring strategy. For example, training costs may be higher, attrition rates may be lower, and wage gain may be higher, among companies that tend to hire lower skilled workers at lower starting wages.

## Section 5: Factors for Success in Employee Development Programs

What are the factors of success in developing an effective employment program? What kinds of partnerships are necessary? Are there policy or advocacy levers that would incentivize businesses to implement an employee development practice among entry-level workers?

Among the key factor of success, according to Casner-Lotto, Rosenblum, and Wright, is the ability to determine the level of in-house resources and experience related to creating a training curriculum and employee development program and the ability to provide specific trainings. In addition, partnerships with local community colleges and universities are critical, especially if they are able to offer the training on-site at the workplace.

Casner-Lotto, Rosenblum, and Wright offer the best summary of the factors of success in employee development programs:<sup>29</sup>

- *An overall company culture that values and is committed to providing various types of training in support of employees' career growth and advancement*
- *A focus on "smart hiring" that screens for readiness: strong work ethic, good interpersonal skills, and professional attitude*
- *Strategic partnerships with local colleges*
- *Integration of applied skills in the job-specific and career development training categories*
- *Strong program oversight and emphasis on accountability to ensure trainees' adherence to [the] training goals and strategies*

- *Continuous evaluation of training programs so that content is aligned with current and future company needs*
- *Proven track records of success in terms of employee recruitment, retention, and leadership development.*

Freeman and Combes Taylor (2002) suggest that the more that a company hires lower-skilled workers, the more critical that it is that the company forms partnerships with community-based providers and workforce development organizations, since many of those workers may have complex problems as well as workforce readiness deficiencies. This implies that the cost to the company to provide the employee development services needed by the lower skilled workers may be prohibitively expensive.

The SBCTC Career Pathways Institute (2007) states that for community-employer partnerships to work well, the community partners and the employers need to have shared language and shared goals.

Few studies have reviewed possible policy levers to incentivize employee development. The primary policy lever has been direct public subsidy for incumbent workers. This has most often been provided as an incentive to attract a business to remain in or relocate to a state, such as providing customized training provided by technical colleges. By 2008, states were investing about \$550 to \$800 million per year to provide funding for incumbent worker training (Hollenbeck, 2008). In some cases, states provide subsidies for training of only lower-skilled workers.

Hollenbeck also found that other employers were provided a *de facto* subsidy by participating in incumbent worker training programs that targeted very low skilled workers. In some cases the employers were not providing the training themselves.

John Bishop<sup>30</sup> discussed five additional policy levers, among others:

1. Allow employees to qualify for guaranteed, low-interest student loans based on their participation in significant training activities.
2. Improve systems for certifying skill development, specific to various industries.
3. Creating a guaranteed loan program for firms to cover the costs of an employee development program that targets low-skilled employees.
4. A small training tax charged on all employers, except the smallest, which could be offset if the employer offers a minimum of employee development activities.
5. A small subsidy or tax credit given to employers who provide an amount of employee development over a given, high threshold which varies for each industry, with a high subsidy rate when a higher proportion of the training or employee development is provided to the employers low-skilled workers.

Another type of public subsidy would be to reimburse the company equal to the cost of employee release time to participate in training.

In conclusion, employee development activities generally have a positive business benefit, when compared to the cost. These activities, especially training, also have a positive impact on workers themselves, specifically wage increases, compared to workers who did not receive training. Employee development activities targeted to the lowest skilled workers often provide a public good and may have a lower benefit cost ratio, necessitating a public subsidy or incentive.

---

<sup>1</sup> Richard W. Glover and Christopher King. "Sectoral Approaches to Workforce Development: Toward an Effective U.S. Labor-Market Policy." The University of Texas at Austin, 2009.

<sup>2</sup> Rocio Bonet. "Employer Effects on Intraorganizational Career Mobility: Is There a Role for Work Practices." The Wharton School, University of Pennsylvania, RDC Conference. Sept. 2006.

- 
- <sup>3</sup> James Combs, Yongmei Liu, Angela Hall, David Ketchen. "How Much do High-Performance Work Practices Matter? A Meta-Analysis of their Effects on Organizational Performance." Blackwell Publishing, 2006.
- <sup>4</sup> Crandall, Susan Ph.D. "Promoting Employer Practices That Increase Retention And Advancement." *Welfare Information Network*. Vol. 8, No 1, Jan 2004. <http://www.financeproject.org/Publications/promotingemployerpracticesIN.htm>
- <sup>5</sup> Wendy Fleischer. "Extending Ladders: Findings from the Annie E. Casey Foundation's Jobs Initiative." Annie E. Casey Foundation, Baltimore, MD. Sept. 2001.
- <sup>6</sup> SBCTC Career Pathways Institute. "Sector Strategies, Career Ladders, and Engaging Employers as Partners." Workforce Training & Education Coordinating Board, June 2007.
- <sup>7</sup> Jill Casner-Lotto, Elyse Rosenblum, and Mary Wright. "The Ill-Prepared U.S. Workforce: Exploring the Challenges of Employer-provided Workforce Readiness Training." The Conference Board. 2009.
- <sup>8</sup> State of Corporate Citizenship, 2009 Survey. "Education, Training, and Career Advancement Findings: Preliminary Top Line Results." Hitachi Foundation, Sept. 2009.
- <sup>9</sup> Susan Imel. "Workplace Literacy: Its Role in High Performance Organizations." ERIC Clearinghouse on Adult Career and Vocational Education, Digest #158, Columbus, OH, 1995.
- <sup>10</sup> Amanda L. Ahlstrand, Laurie J. Bassi, and Daniel P. McMurrer, "Workplace Education for Low-Wage Workers." *W.E. Upjohn Institute for Employment Research*. Kalamazoo, MI, 2003.
- <sup>11</sup> Harley Frazis and Mark Loewenstein. On-the-job Training. Now Publishers. 2007.
- <sup>12</sup> Maureen Conway, Amy Kays Blair, Catherine Gibbons. "Investigating Demand Side Outcomes: Literature Review and Implications." The Aspen Institute, March 2003.
- <sup>13</sup> Freeman, Jennifer and Judith Combes Taylor. *Beyond Welfare-to-Work: Helping Low-Income Workers Maintain Their Jobs and Advance in the Workforce: Paper #1: Demand-Led Retention*. Boston: Jobs for the Future, 2002. [http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?\\_nfpb=true&\\_ERICExtSearch\\_SearchValue\\_0=ED472425&ERICExtSearch\\_SearchType\\_0=no&accno=ED472425](http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_ERICExtSearch_SearchValue_0=ED472425&ERICExtSearch_SearchType_0=no&accno=ED472425)
- <sup>14</sup> Tony Proscio and Mark Elliott. "Getting In, Staying On, Moving Up: A Practitioner's Approach to Employment Retention." Public/Private Ventures, undated.
- <sup>15</sup> See, for example, Jack J. Phillips, Return on Investment in training and performance improvement programs. Gulf Publishing Company, Houston. 1997.
- <sup>16</sup> The Aspen Institute, Workforce Strategies Initiative. "Assessing Employer Return on Investment for Frontline Healthcare Workforce Development." Sept. 2005.
- <sup>17</sup> Kevin Hollenbeck. "Is There a Role for Public Support of Incumbent Worker On-the-Job Training." Upjohn Institute Staff Working Paper No. 08-138. Jan. 2008.
- <sup>18</sup> Laurie Bassi and Daniel McMurrer. *Are Skills a Cost or Asset?* The Milken Institute Review. Quarter 3, 2004.
- <sup>19</sup> Michael R. Bloom and Brenda Lafleur. "Turning Skills into Profit: Economic Benefits of Workplace Education Program." The Conference Board, 1999.
- <sup>20</sup> Scott Brum. "What Impact Does Training Have on Employee Commitment and Turnover?" University of Rhode Island.
- <sup>21</sup> See, for example, Jack J. Phillips, Return on Investment in training and performance improvement programs. Gulf Publishing Company, Houston. 1997.
- <sup>22</sup> Phillips. 1997.
- <sup>23</sup> Amy Blair. "Business Value Assessment: Identifying and Tracking Employer Outcomes." The Aspen Institute, Workforce Strategies Initiative. Nov. 2005.
- <sup>24</sup> Harley J. Frazis and James R Spletzer. "Worker training: what we've learned from the NLSY79". *Monthly Labor Review*, Feb. 2005.
- <sup>25</sup> Richard N. Jones, John Morris, Navjeet Singh, and Johan Uvin. "Improving Quality of Care: a Closer Look". Research and Evaluation Brief, v4-2, Commonwealth Corporation. March 2006.
- <sup>26</sup> Paul Adrian Lengermann. "The Benefits and Costs of Training: A Comparison of Formal Company Training, Vendor Training, Outside Seminars, and School Based Training." *Human Resource Management*, Fall 1996, Vol. 35, No. 3, pp 361-381.
- <sup>27</sup> Harley Frazis and Mark A. Loewenstein, "Reexamining the Returns to Training: Functional Form, Magnitude, and Interpretation," BLS working paper no. 367, *Journal of Human Resources*, Spring 2005.
- <sup>28</sup> Anne C. Gielen. "Performance pay, training and labor mobility." July 2007.
- <sup>29</sup> Casner-Lotto, Rosenblum, and Wright. 2009. Page 9.
- <sup>30</sup> John H. Bishop. "The Incidence of and Payoff to Employer Training: a Review of the Literature with Recommendations for Policy." Working Paper 94-17, School of Industrial and Labor Relations, Cornell University, 1994.
-